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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/430,297	10/29/1999	MARK SCOTT	1848.0040000	7056
7590 11/19/2004			EXAMINER	
STERNE KESSLER GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE N W SUITE 600 WASHINGTON, DC 200053934			WILSON, ROBERT W	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/430,297

Applicant(s)

SCOTT, MARK

Examiner

Robert W Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4, 6-9, 12-15 and 18-22 is/are allowed.
- 6) ☒ Claim(s) 5, 10, 11, 16 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

**1.0** The application of Scott entitled SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT FOR POINT-TO-POINT BANDWIDTH CONSERVATION IN AN IP NETWORK filed on 10/29/04 and amended on 8/2/04 was examined. Claims 1-22 are pending.

### *Claim Rejections - 35 USC § 103*

**2.0** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**3.0** **Claims 5, 10-11, & 16-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooklev (U.S. Patent No.: 6,574,218).

Referring to **Claim 5**, Cooklev teaches A method for regenerating missing or damaged information in a VoIP packet (Figs 3 and 5 show a method for regenerating missing or damaged packets in which voice packets are being sent between two gateways in the Internet per col. 2 lines 1-67) comprising the steps of:

(1) transmitting a plurality of VoIP packets from a source to a destination (PSTN voice is converted into packets and sent between gateways and then converted back into PSTN voice or from source to destination per col. 2 lines 1-67)

transmitting a check sequence packet from said source to said destination upon completion of transmission of said plurality of VoIP packets (The applicant broadly claims "sending a check sequence packet". The CHANNEL CODER per Fig 3 appends redundant info into the packet or packets which reads on "sending a check sequence packet" per col. 8 lines 1-17. The PACKET TRANSMITTER transmits the packets per Fig 3)

wherein said check sequence packet comprises information that when executed, regenerates missing or damaged information transmitted in any of said plurality of VoIP packets (The PACKET PROCESSOR per Fig 5 detects the missing or damaged packet or info. The MISSING PACKET RECONSTRUCTOR regenerating missing or damaged packet per Fig 5)

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Cooklev does not expressly call for: transmitting VoIP packets from a source to destination but teaches PSTN voice is converted into packets and sent between gateways and then converted back into PSTN voice or from source to destination per col. 2 lines 1-67.

It would have been obvious to one of ordinary skill in the art at the time of the invention that PSTN voice is converted into packets and sent between gateways and then converted back into PSTN voice or from source to destination per col. 2 lines 1-67 performs the same function as transmitting VoIP packets from a source to destination.

Referring to **Claim 10**, Cooklev teaches: An Internet telephony system for regenerating missing or damaged information in a VoIP packet (Figs 3 and 5 show a method for regenerating missing or damaged packets in which voice packets are being sent between two gateways in the Internet per col. 2 lines 1-67 or Internet telephony system)

Redundancy means for transmitting a check sequence packet upon completion of a transmission of a predetermined quality of VoIP packets (The applicant broadly claims "sending a check sequence packet". The CHANNEL CODER per Fig 3 appends redundant info into the packet or packets which reads on per col. 8 lines 1-17 or redundancy means)

Means for regenerating missing or damaged information in any of said predetermined quality of VoIP packets (MISSING PACKET RECONSTRUCTOR or means for regenerating missing or damaged packets per Fig 5)

Cooklev does not expressly call for: VoIP packets but teaches PSTN voice is converted into packets and sent between gateways and then converted back into PSTN voice per col. 2 lines 1-67.

It would have been obvious to one of ordinary skill in the art at the time of the invention that PSTN voice is converted into packets and sent between gateways and then converted back into PSTN voice per col. 2 lines 1-67 performs the same function as VoIP packets.

**In Addition Cooklev teaches:**

Regarding **Claim 11**, further comprising means for implementing a parity system to regenerate missing or damaged information (parity per col. 8 line 56)

Referring to **Claim 16**, Cooklev teaches: A computer program product comprising a computer useable medium having a computer readable program code means embedded in said medium for causing a computer to regenerate missing or damaged information in a VoIP packet transmitted between an originating gateway and a destination gateway (Figs 3 & 4 regenerating missing or damaged packets converted from PSTN to packets between gateways per col. 2 line 1-67) comprising:

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A first computer readable program code means for causing the computer to transmit a check sequence packet at regular packet intervals (redundant info is appended to selected packet or packets or transmitting a check sequence packet at regular intervals per col. 8 lines 1-67)

Wherein said first computer readable program code means comprising computer readable program code means for causing the computer to alter a duration of said intervals to reach a desired tradeoff between increased tolerance to loss and bandwidth (The applicant broadly claims that the duration of said intervals is reached to desire a tradeoff between loss and bandwidth. The reference teaches redundant info is appended to selected packet or packets per col. 8 lines 1-67. It is well known in the art that sending redundant info in every packet decreases bandwidth while increase tolerance to loss. One skilled in the art has the ability to adjust parameters or determine whether redundant info is sent in a packet or packets or vary the interval which results in a solution to the tradeoff between increased tolerance to loss and bandwidth per col. 8 lines 1-67)

Computer readable program code means for causing the computer to regenerate missing or damaged information in a previously transmitted VoIP packet by using information located inside of said check sequence packet (MISSING PACKET RECONSTRUCTOR or means for regenerating missing or damaged packets per Fig 5)

Cooklev does not expressly call for: program code on a computer readable medium but teaches apparatus which performs MISSING PACKET RECONSTRUCTOR per Fig 5 as well as sending a packet or packets with redundant information col. 8 lines 1-67.

It is within the level of one skilled in the art at the time of the invention to implement MISSING PACKET RECONSTRUCTOR as well as sending a packet or packets with redundant information in software code. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software or program code on a computer readable media so they can be executed on a processor.

**In Addition Cooklev teaches:**

Regarding **Claim 17**, further comprising third computer readable program code means for causing the computer to utilize a parity system to regenerate said missing or damaged information (parity error per col. 8 line 56. It is within the level of one skilled in the art at the time of the invention to implement parity error function in software code. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software or program code on a computer readable media so they can be executed on a processor.)

***Allowable Subject Matter***

**4.0** The present invention is directed to a communication device which “compresses data streams from a plurality of concurrent calls from a plurality of channels into packets; aggregating

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said packets into the larger data packet, said data packet including information for synchronizing a current channel state at the originating gateway with a record of said channel state at the destination gateway". The closest prior art Goldberg (U.S. Patent No.: 6,389,038 B1) teaches a method or system combining or compressing data streams into a larger data packet by providing synchronization bits which are utilized between the gateways and the multiplexer. The closest prior art Goldberg (U.S. Patent No.: 6,389,038 B1) does not disclose either singularly or in combination anticipate or render the following claim limitation obvious:

"synchronizes a current channel state at the originating gateway with a record of said channel state at the destination gateway " as claimed in **Claims 1, 6, & 12.**

**In Addition:**

**Claims 2-4 and 18-20** are also allowable because they depend upon **Claim 1.**

**Claims 7-9 and 21-22** are also allowable because they depend upon **Claim 6.**

**Claims 13-15** are also allowable because they depend upon **Claim 12.**

***Response to Amendment***

**5.0** Applicant's arguments with respect to Claims 5, 10-11, & 16-17 have been considered but are moot in view of the new ground(s) of rejection.

The examiner respectively disagrees with the applicant's argument that the new reference Cooklev fails to teach or disclose: transmitting a check sequence packet from said source to said destination upon completion of transmission of said plurality of VoIP packets

Cooklev teaches: transmitting a check sequence packet from said source to said destination upon completion of transmission of said plurality of VoIP packets

The applicant broadly claims "sending a check sequence packet". The CHANNEL CODER per Fig 3 appends redundant info into the packet or packets which reads on "sending a check sequence packet" per col. 8 lines 1-17. The PACKET TRANSMITTER transmits the packets per Fig 3 or transmitting a check sequence packet from said source to said destination upon completion of transmission of said plurality of VoIP packets.

The examiner respective disagrees with the applicant's argument that the new reference Cooklev fails to teach or disclose: wherein said check sequence packet comprises information that when executed, regenerates missing or damaged information transmitted in any of said plurality of VoIP packets

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Cooklev teaches : The PACKET PROCESSOR per Fig 5 detects the missing or damaged packet or info. The MISSING PACKET RECONSTRUCTOR regenerating missing or damaged packet per Fig 5 or wherein said check sequence packet comprises information that when executed, regenerates missing or damaged information transmitted in any of said plurality of VoIP packets

Cooklev does not expressly call for: transmitting VoIP packets from a source to destination but teaches PSTN voice is converted into packets and sent between gateways and then converted back into PSTN voice or from source to destination per col. 2 lines 1-67.

It would have been obvious to one of ordinary skill in the art at the time of the invention that PSTN voice is converted into packets and sent between gateways and then converted back into PSTN voice or from source to destination per col. 2 lines 1-67 performs the same function as transmitting VoIP packets from a source to destination.

**6.0** Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### **Conclusion**

**7.0** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571/272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free),



Robert W Wilson  
Examiner  
Art Unit 2661

RWW  
November 12, 2004

  
**KENNETH VANDERPUYE**  
**PRIMARY EXAMINER**